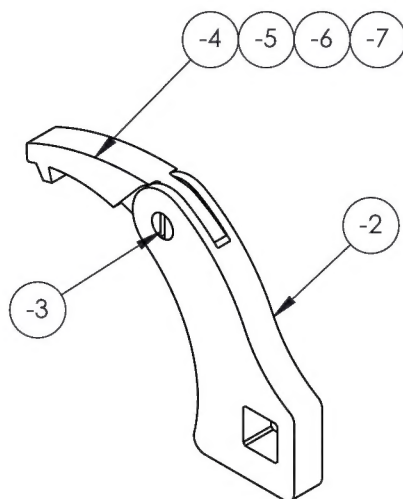


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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
A		CH'D -4 & -7 PRECISION FOR DIMENSION FROM .21 TO .205 PER G.E.	3/1/2012	RJC	GE
B	14-0142	-2 ADDED DIMENSION .503-.505. CH'D DIMENSION TOLERANCE ON NON-CRITICAL DIMENSION. -4, -5, -6, -7 CH'D DIMENSION TOLERANCE ON NON-CRITICAL DIMENSIONS. -7 ADDED ENGRAVE NOTE.	8/29/2014	DJN	GE
2	17-0157	UPDATED TO NEW DRAFTING STANDARD. -2, -4, -5, -6, -7 CH'D MAT'L WAS 4140 IS 4140/4142. -2, -3, -4, -5, -6, -7 ADDED FINISH SPEC QMSI-6.2.2. B.O REV D. -2 CH'D DIM WAS 1/4-28 UNF $\sqrt{110^\circ}$ X \varnothing .25 $\sqrt{.003}$ A IS 1/4-28 UNF -28 $\sqrt{.42}$ $\sqrt{\varnothing .25}$ X 110° NEAR SIDE $\sqrt{\varnothing .003}$ A. ADDED DIM 2X .670 MIN. -3 CH'D DIM WAS .060 IS .06. WAS .02 X 45° 1/4-28 UNF $\sqrt{.001}$ A IS 1/4-28 UNF -2A $\sqrt{\varnothing .001}$ A. CH'D MAT'L WAS 4140 Q&T IS 4140/4142. ADDED FINISH A QMSI-6.2.2. B.O. REV D. -4, -5, -6 CH'D DIM WAS 3.343 IS 3.34. ADDED ENGRAVE DASH # COLUMN TO TABLE. CH'D NOTE WAS ENGRAVE -# ONLY IS ENGRAVE SEE TABLE. -7 CH'D NOTE WAS ENGRAVE -# ONLY IS ENGRAVE "7".	6/20/2017	RJC	JAG



NOTES:
1. SEE SHEET 4 TABLE FOR DIMENSIONS
& TOLERANCES FOR -4 THRU -6.
2. ONE EACH -4 THRU -7 PER TOOL.



TITLE
ADJUSTABLE SPANNER WRENCH

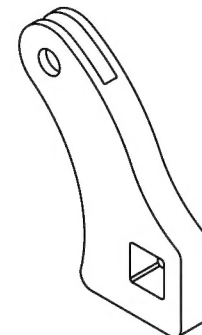
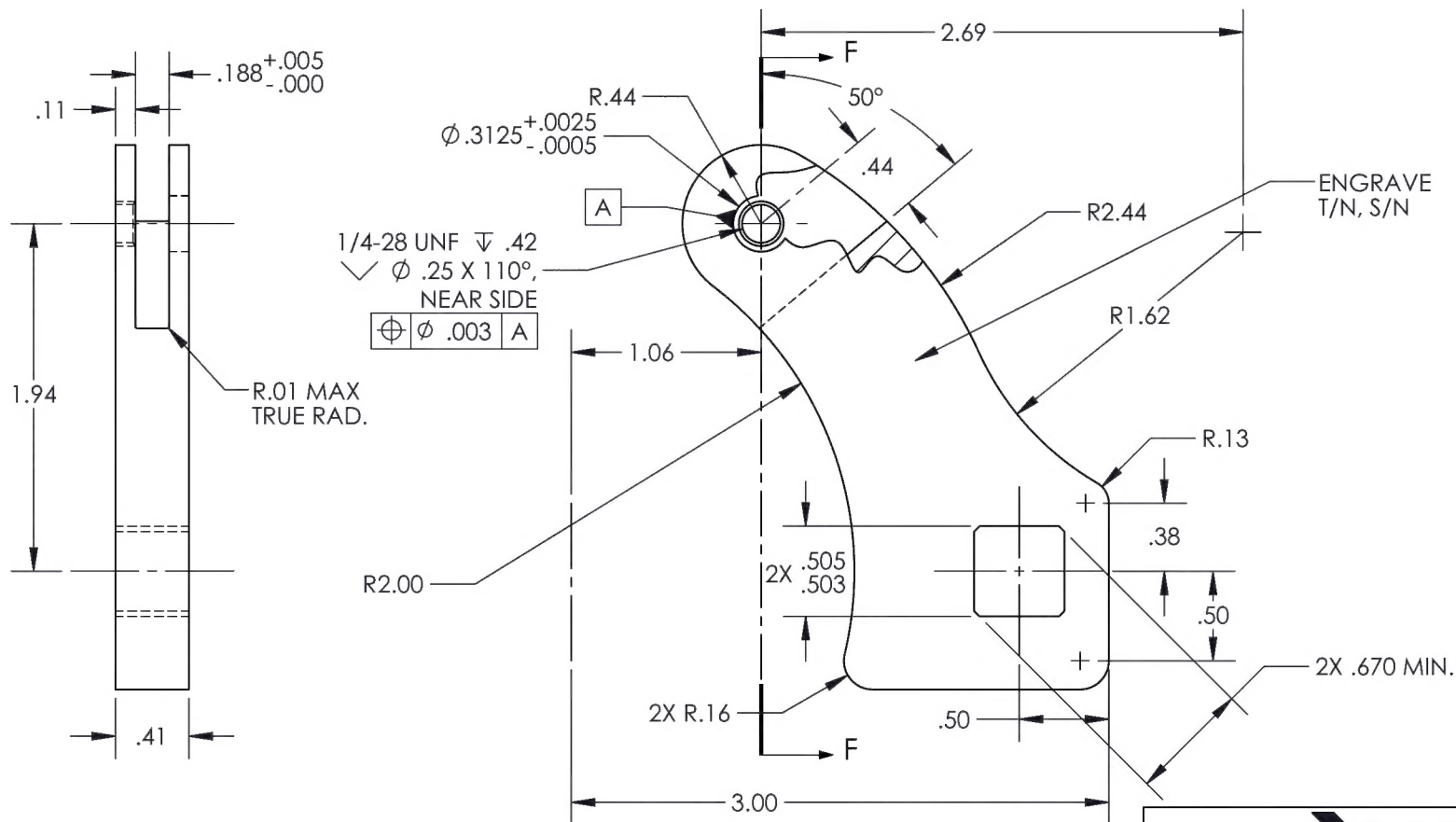
DWG NO. RB AN8515-1

REV	2
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ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.	MAT'L		UNLESS OTHERWISE SPECIFIED	
									HEAT TREAT FINISH		DIMENSIONS ARE IN INCHES	FRACTIONS ± 1/8
			-2	1	HANDLE	4140/4142		2	SPEC		.XXX ± .005	ANGLES ± 5°
			-3	1	BOLT	4140/4142		3	DRAWN BY: CLOUGH		.XX ± .01	SURFACES = 125/
			-4	1	ARM	4140/4142		4	CHECKED: DD 06/22/2017		.X ± .1	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
			-5	1	ARM	4140/4142		4	OPPS APPR: AA 06/26/2017			2. DIMENSIONAL LIMITS APPLY AFTER PLATING
			-6	1	ARM	4140/4142		4	QA APPR: JL 06/28/2017			3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
			-7	1	ARM	4140/4142		5	APPROVED: JAG 07/06/2017		USED ON MODEL	
									SCALE 1:2		DATE 1/12/2012	SHEET 1 OF 5

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REVISIONS						
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED	
B	14-0142	-2 ADDED DIMENSION .503-.505. CH'D DIMENSION TOLERANCE ON NON-CRITICAL DIMENSION.	8/29/2014	DJN	GE	
2	17-0157	-2 CH'D DIM WAS 1/4-28 UNF $\sqrt{110^\circ \times \varnothing .25}$ $\sqrt{\frac{.003}{A}}$ IS 1/4-28 UNF -28 $\sqrt{.42}$ $\sqrt{\varnothing .25 \times 110^\circ}$ NEAR SIDE $\sqrt{\frac{.003}{A}}$ ADDED DIM $\sqrt{2X .670 \text{ MIN.}}$ CH'D MAT'L WAS 4140 IS 4140/4142. ADDED FINISH SPEC QMSI-6.2.2, B.O REV D.	6/20/2017	RJC	JAG	



②
HANDLE



TITLE
ADJUSTABLE SPANNER WRENCH

DWG NO. RB AN8515-1-2

REV
2

MAT'L 4140/4142

HEAT RC 22-32
TREAT

FINISH BLACK ANODIZE

SPEC QMSI-6.2.2, B.O. REV D

DRAWN BY:	CLOUGH
-----------	--------

CHECKED:	DD 06/22/2017
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OPPS APPR:	AA 06/26/201
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QA APPR:	JL 06/28/2017
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APPROVED:	JAG 07/06/2017
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UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES

.XXX ± .005 FRACTIONS ± 1/8

.XX	± .01	ANGLES ±.5°
X	± .1	SURFACES

1. BREAK ALL SHARP EDGES

1. BREAK ALL SHARP EDGES
.015 x 45° OR .015R

2. DIMENSIONAL LIMITS APPLY AFTER PLATING

3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009

USED ON MODEL

USED ON MODEL

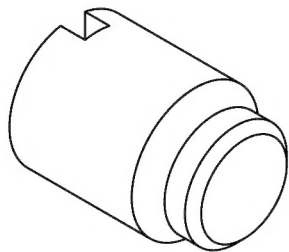
BELL


SCALE	1:1
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DATE	1/12/2012
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SHEET 2 OF 5

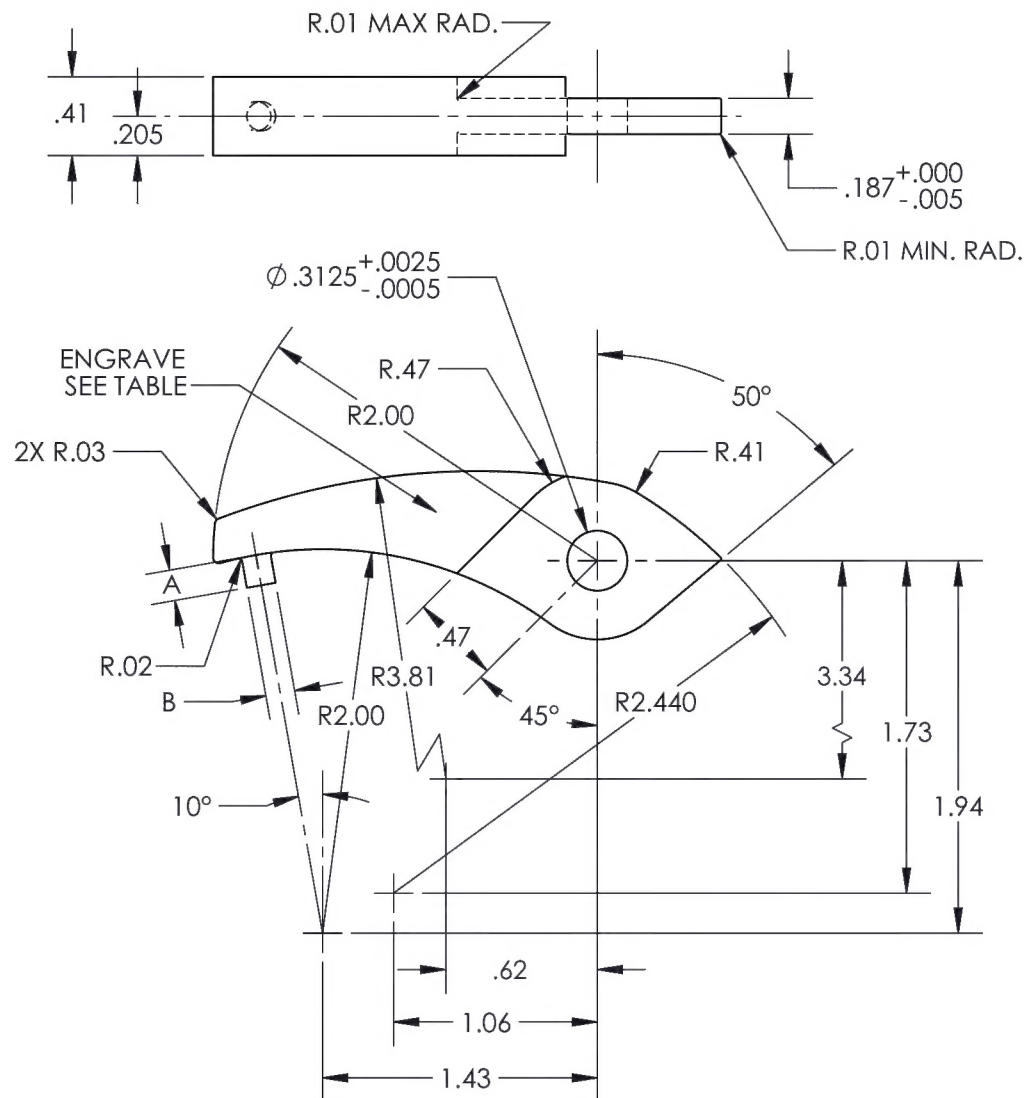
REVISIONS						
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED	
2	17-0157	-3 CH'D DIM WAS .060 IS .06, WAS .02 X 45° 1/4-28 UNF $\frac{.001}{.001}$ IS 1/4-28 UNF -2A $\frac{.001}{.001}$ CH'D MAT'L WAS 4140 Q&T IS 4140/4142. ADDED FINISH IS QMSI-6.2.2, B.O. REV D.	6/20/2017	RJC	JAG	



			
TITLE <h1>ADJUSTABLE SPANNER WRENCH</h1>			
DWG NO. <h2>RB AN8515-1-3</h2>		REV <h2>2</h2>	
MAT'L 4140/4142 HEAT TREAT RC 22-32 FINISH BLACK OXIDE		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125/√	
SPEC QMSI-6.2.2, B.O. REV D		1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
DRAWN BY: CLOUGH		2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
CHECKED: DD 06/22/2017		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
OPSS APPR: AA 06/26/2017		USED ON MODEL	
QA APPR: JL 06/28/2017		BELL	
APPROVED: JAG 07/06/2017		SCALE 4:1 DATE 1/12/2012 SHEET 3 OF 5	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
A		CH'D -4 PRECISION FOR DIMENSION FROM .21 TO .205 PER G.E.	3/1/2012	RJC	GE
B	14-0142	-4, -5, -6 CH'D DIMENSION TOLERANCE ON NON-CRITICAL DIMENSIONS.	8/29/2014	DJN	GE
2	17-0157	-4, -5, -6 CH'D DIM WAS 3.343 IS 3.34. CH'D MAT'L WAS 4140 IS 4140/4142. ADDED FINISH BLACK OXIDE, SPEC QMSI-6.2.2. B.O. REV D. ADDED ENGRAVE DASH # COLUMN TO TABLE. CH'D NOTE WAS ENGRAVE -# ONLY IS ENGRAVE SEE TABLE.	6/20/2017	RJC	JAG



(-4) (-5) (-6)

ARM

AN PART NO.	ITEM	DIMENSION		ENGRAVE DASH # ONLY
		A ±.005	B ±.003	
AN8515-4	.16 PIN ARM	.160	.152	-4
AN8515-5	.25 PIN ARM	.190	.246	-5
AN8515-6	.31 PIN ARM	.250	.308	-6

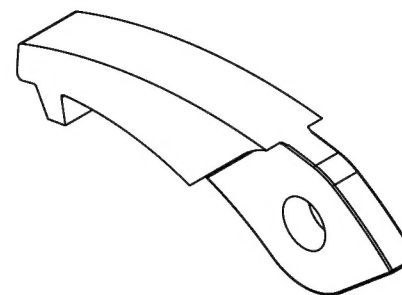
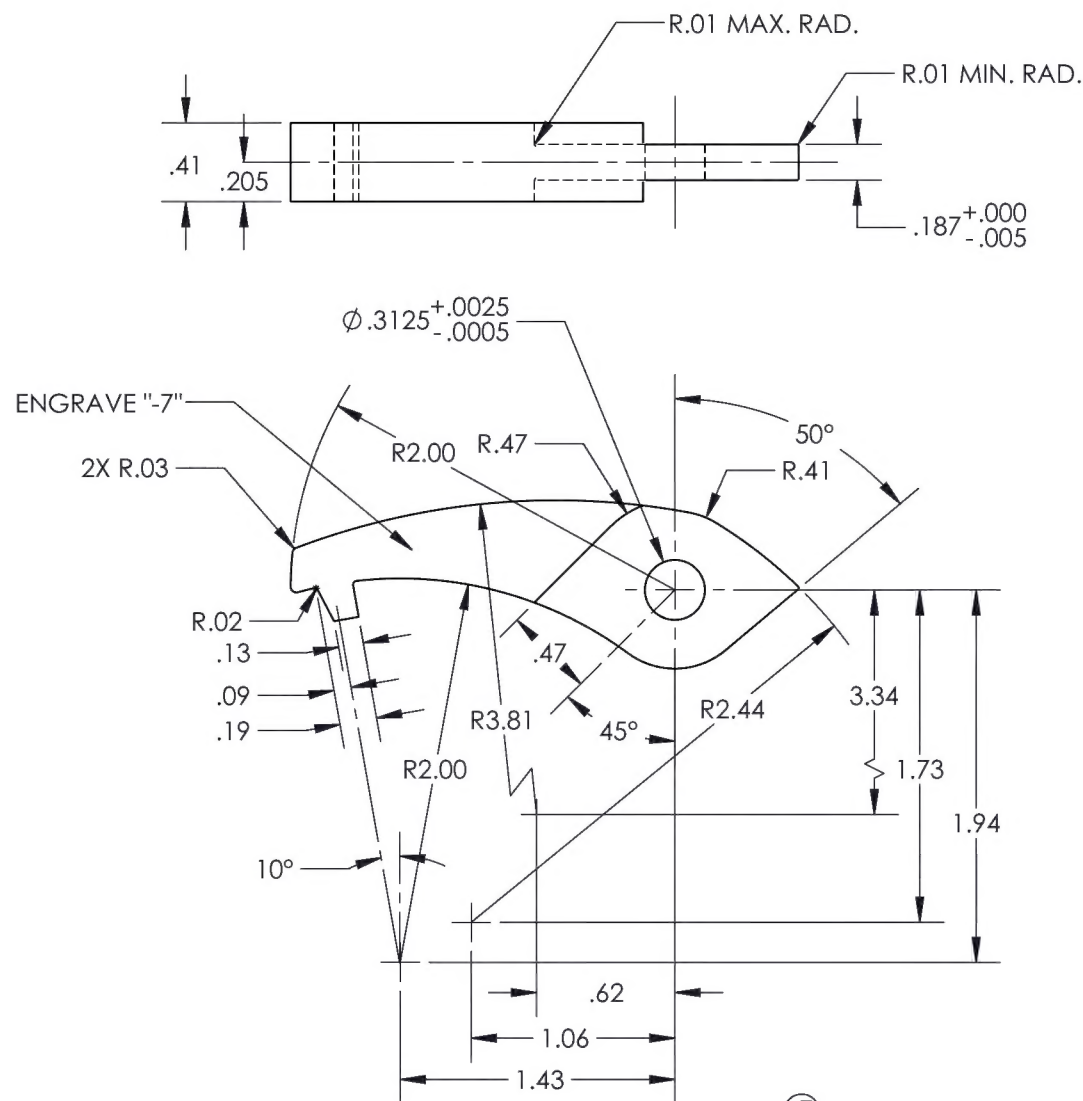
NOTE:

1. SEE TABLE FOR PIN DIMENSION & TOLERANCE.

DART AEROSPACE	
TITLE ADJUSTABLE SPANNER WRENCH	
DWG NO. RB AN8515-1-4	REV 2
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED
HEAT TREAT RC 22-32	DIMENSIONS ARE IN INCHES
FINISH BLACK OXIDE	.XXX ± .005 FRACTIONS ± 1/8
SPEC QMSI-6.2.2, B.O. REV D	.XX ± .01 ANGLES ± 5°
DRAWN BY: CLOUGH	.X ± .1 SURFACES = 125✓
CHECKED: DD 06/22/2017	1. BREAK ALL SHARP EDGES
OPPS APPR: AA 06/26/2017	.015 x 45° OR .015R
QA APPR: JL 06/28/2017	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
APPROVED: JAG 07/06/2017	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 1:1	DATE 1/12/2012
USED ON MODEL BELL	
SHEET 4 OF 5	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
A		CH'D -7 PRECISION FOR DIMENSION FROM .21 TO .205 PER G.E.	3/1/2012	RJC	GE
B	14-0142	-7 CH'D DIMENSION TOLERANCE ON NON-CRITICAL DIMENSIONS. ADDED ENGRAVE NOTE.	8/29/2014	DJN	GE
2	17-0157	-7 CH'D NOTE WAS ENGRAVE -# ONLY IS ENGRAVE "7". CH'D MAT'L WAS 4140 IS 4140/4142. ADDED FINISH SPEC QMSI-6.2.2, B.O. REV D.	6/20/2017	RJC	JAG



(7)
ARM

DART AEROSPACE	
TITLE ADJUSTABLE SPANNER WRENCH	
DWG NO. RB AN8515-1-7	REV 2
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED
HEAT TREAT RC 22-32	DIMENSIONS ARE IN INCHES
FINISH BLACK OXIDE	.XXX ± .005 FRACTIONS ± 1/8
SPEC QMSI-6.2.2, B.O. REV D	.XX ± .01 ANGLES ± 5°
DRAWN BY: CLOUGH	.X ± .1 SURFACES = 125°
CHECKED: DD 06/22/2017	1. BREAK ALL SHARP EDGES
OPPS APPR: AA 06/26/2017	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
QA APPR: JL 06/28/2017	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
APPROVED: JAG 07/06/2017	USED ON MODEL
SCALE 1:1	BELL
DATE 1/12/2012	SHEET 5 OF 5